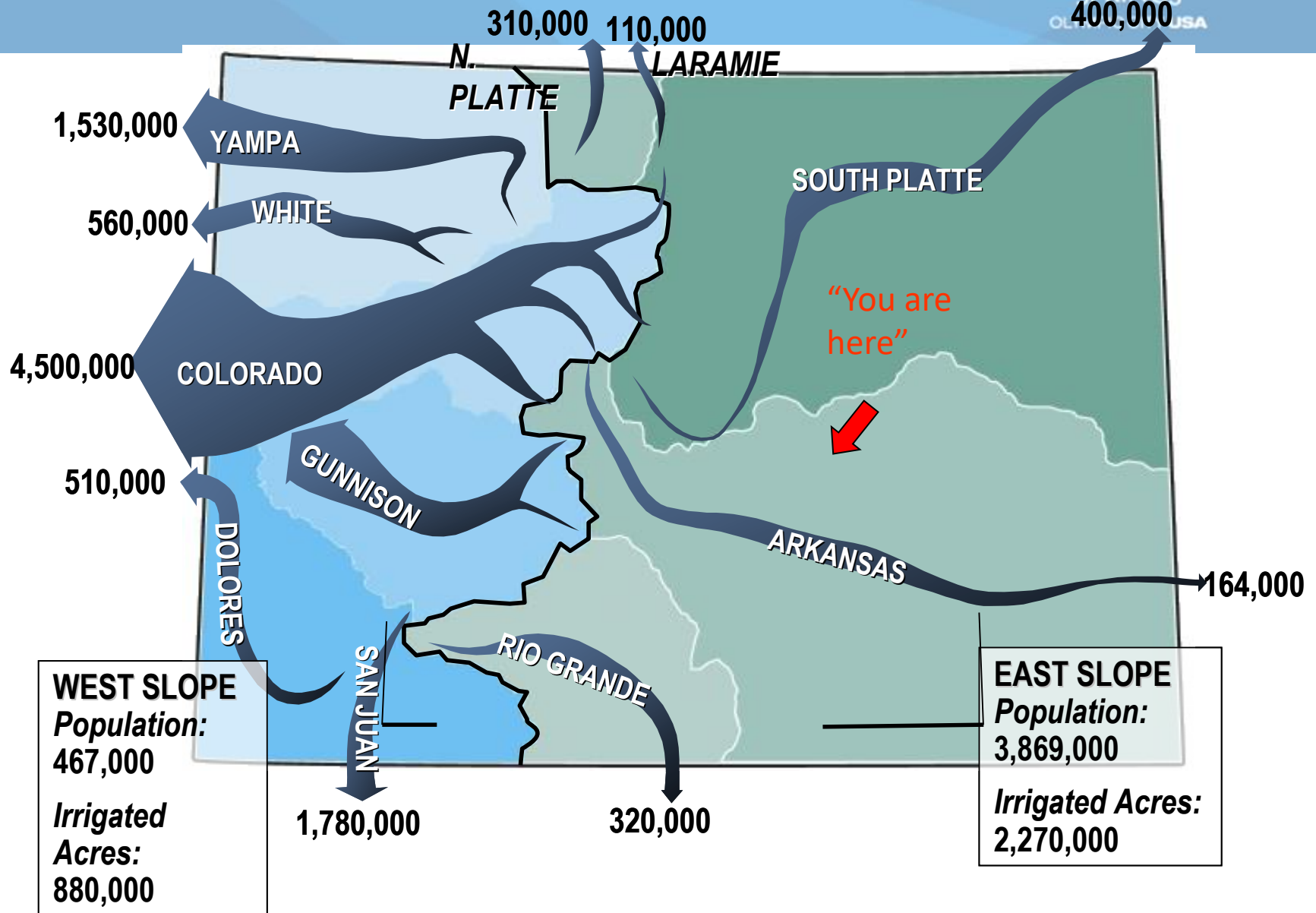
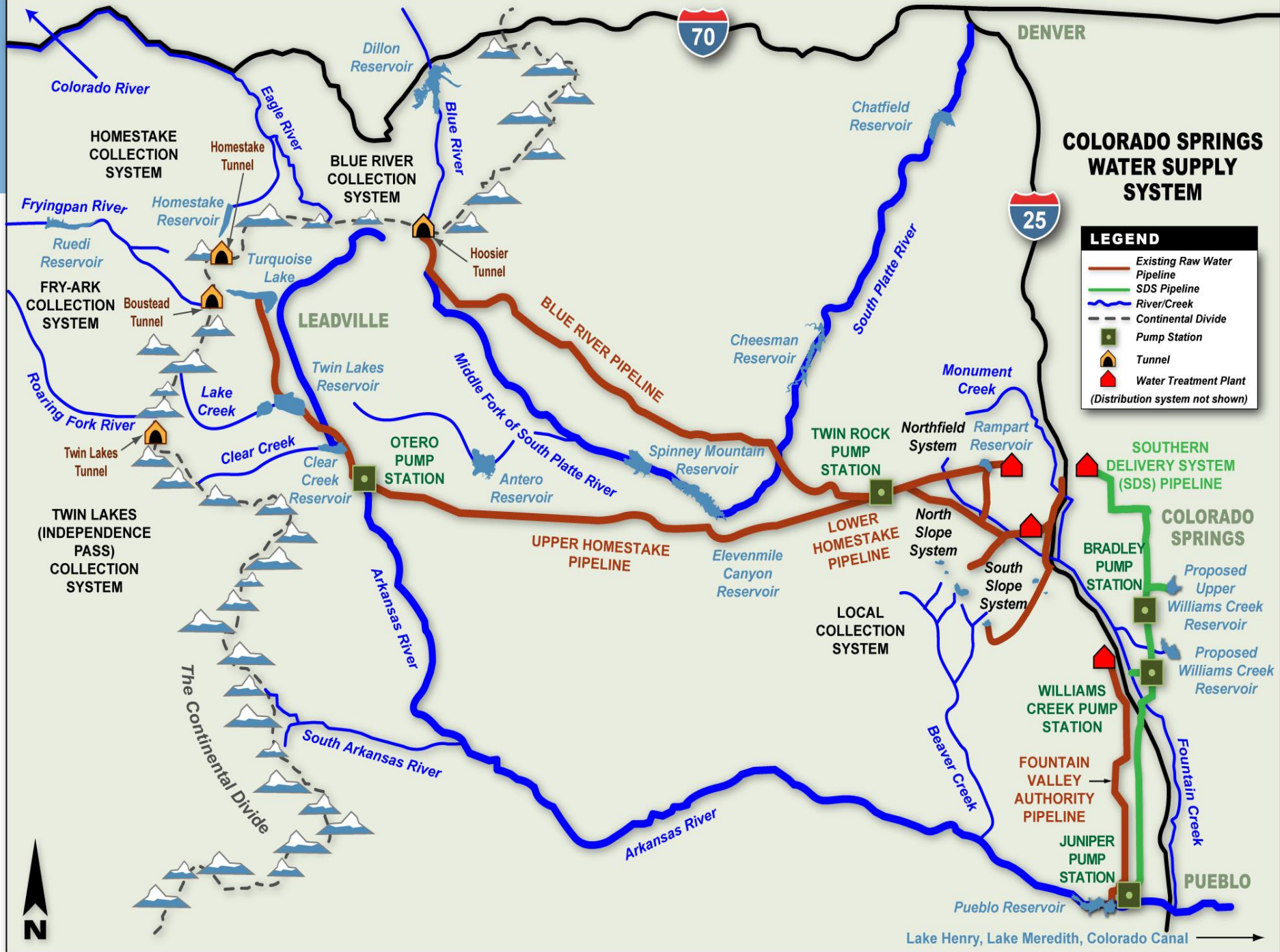


2020 Water Conservation Update



Colorado Watersheds

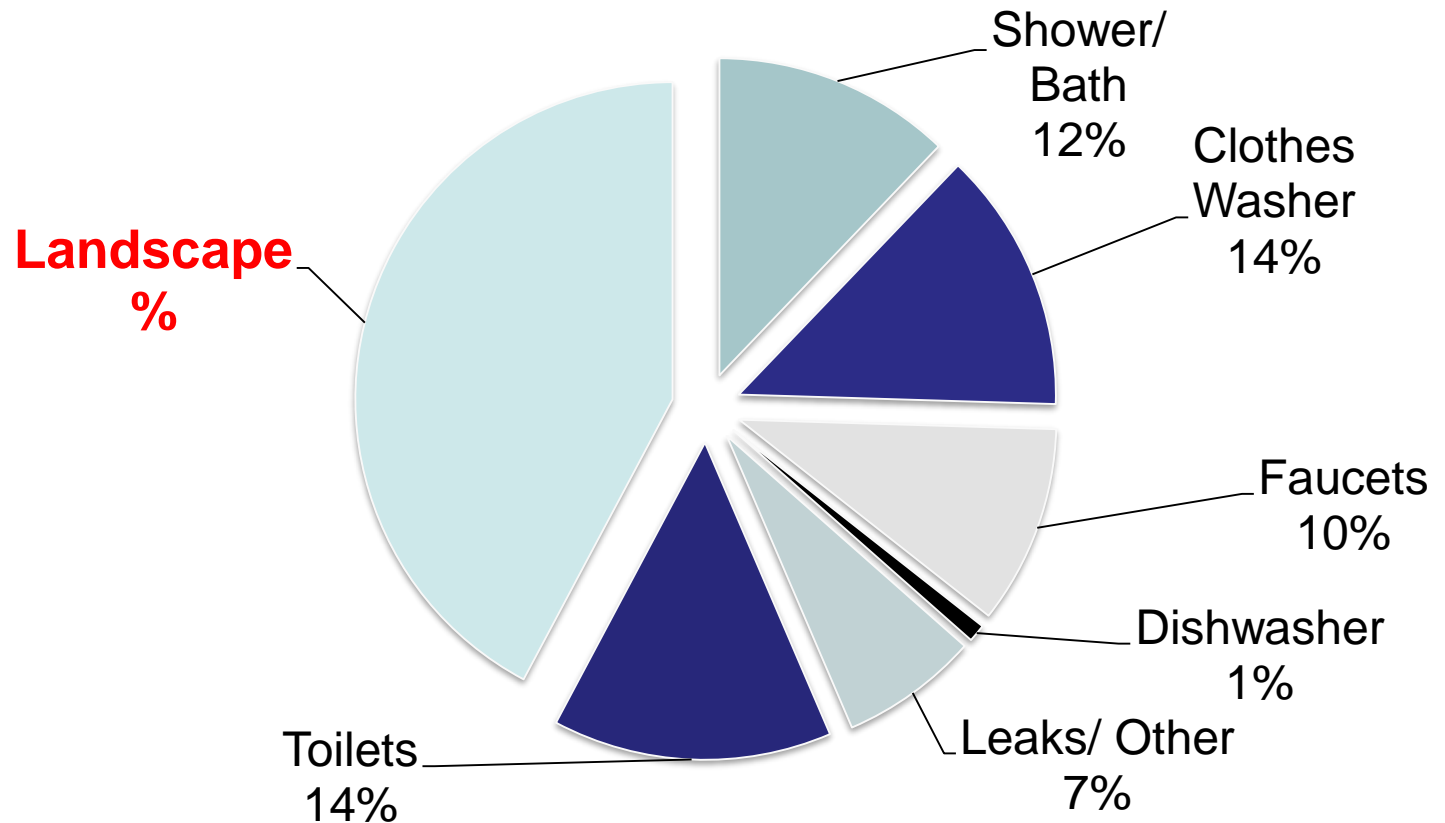


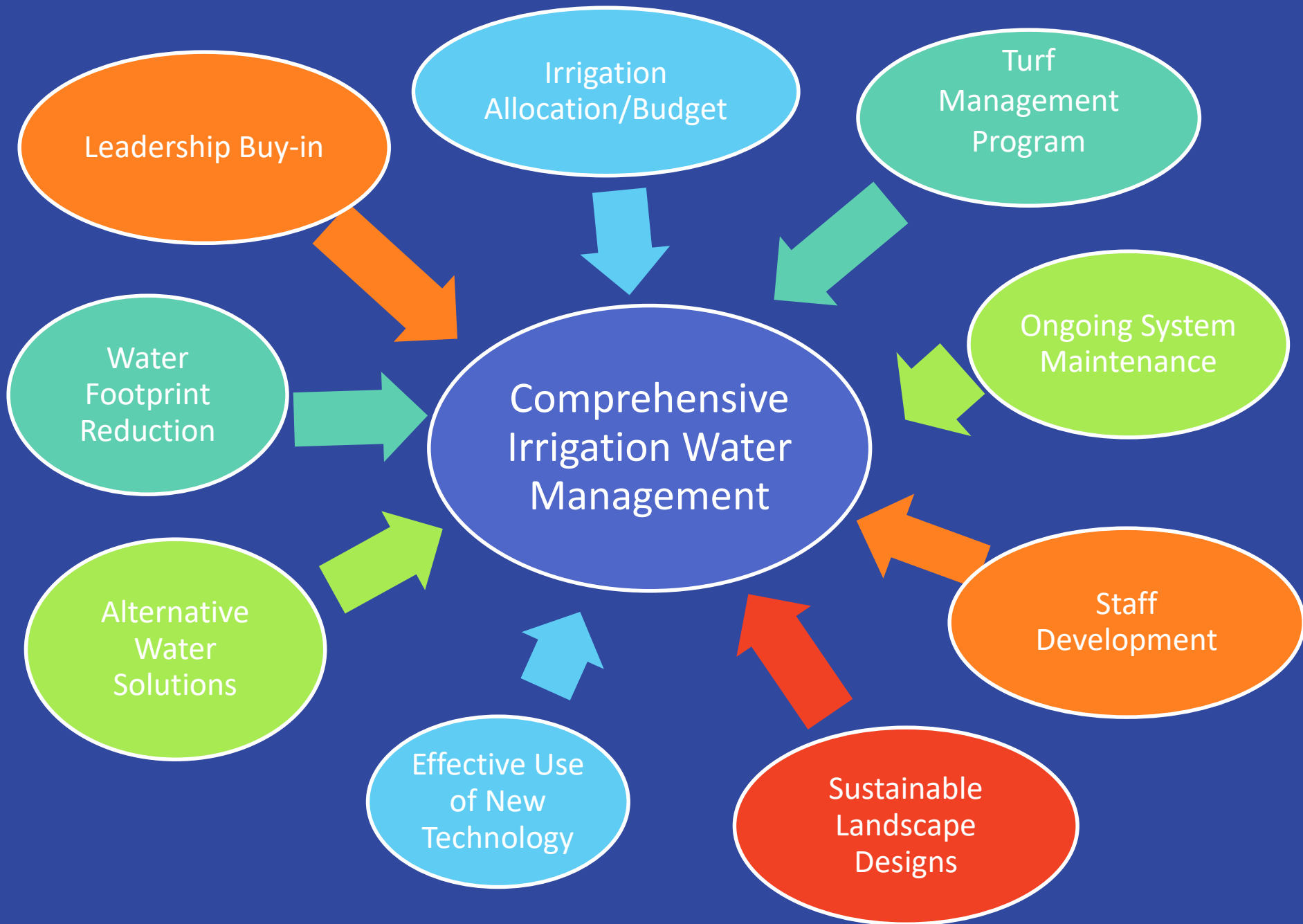


What percentage of your home water is used for landscape?

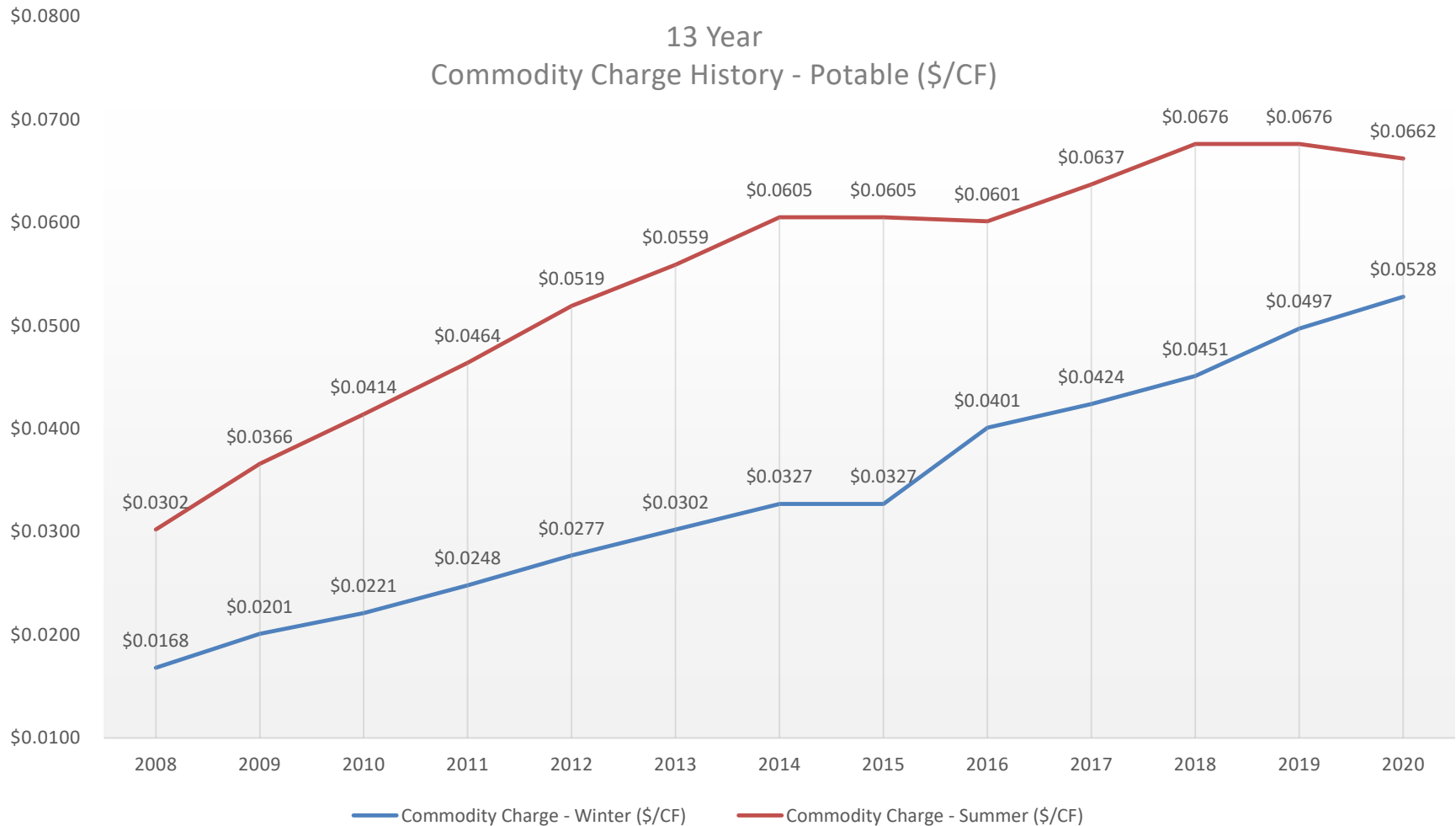


- A. 42-44%
- B. 46-48%
- C. 50-52%





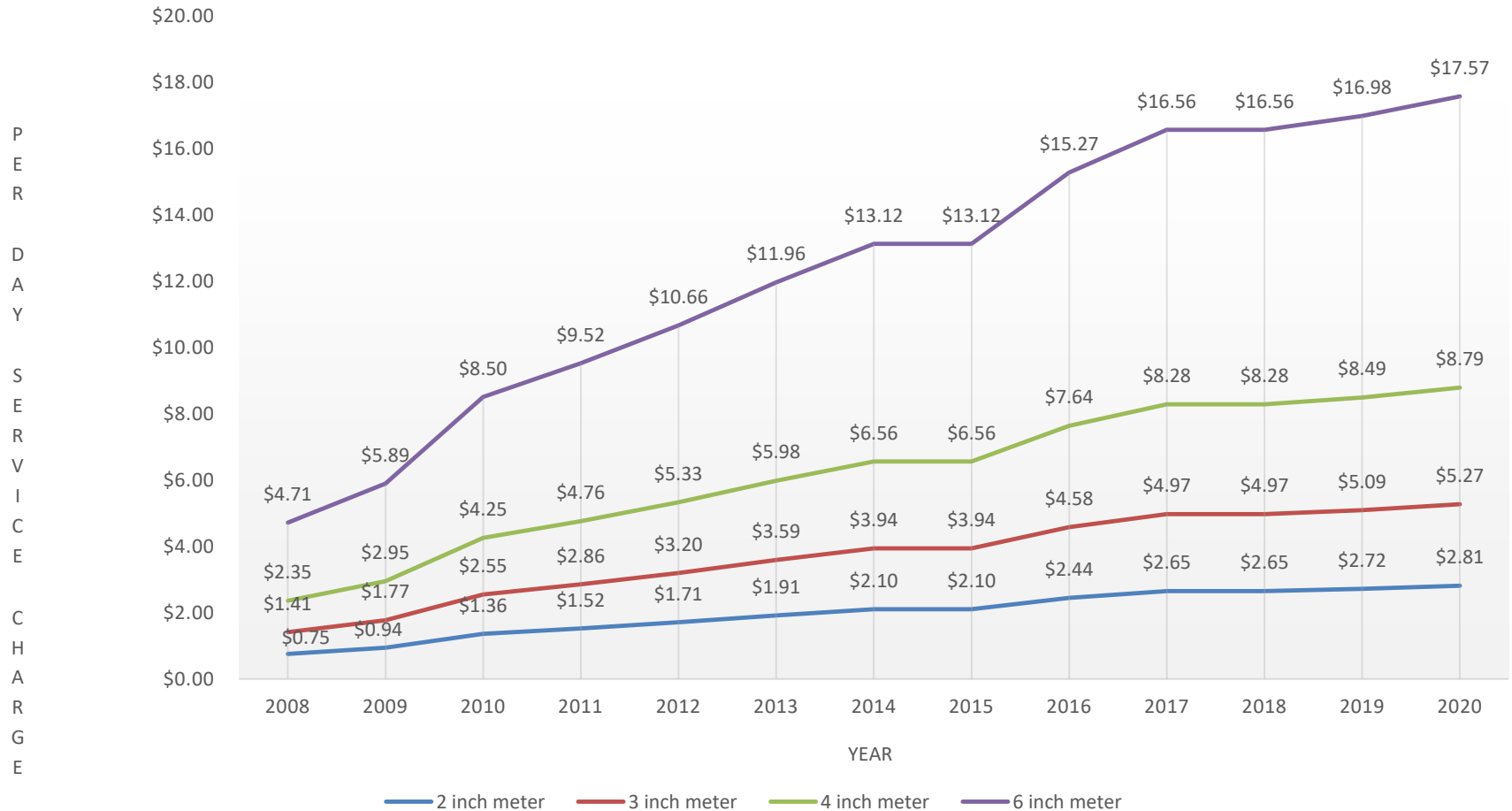
13 Year Commodity Charge History - Potable



13 Year Daily Service Charge History



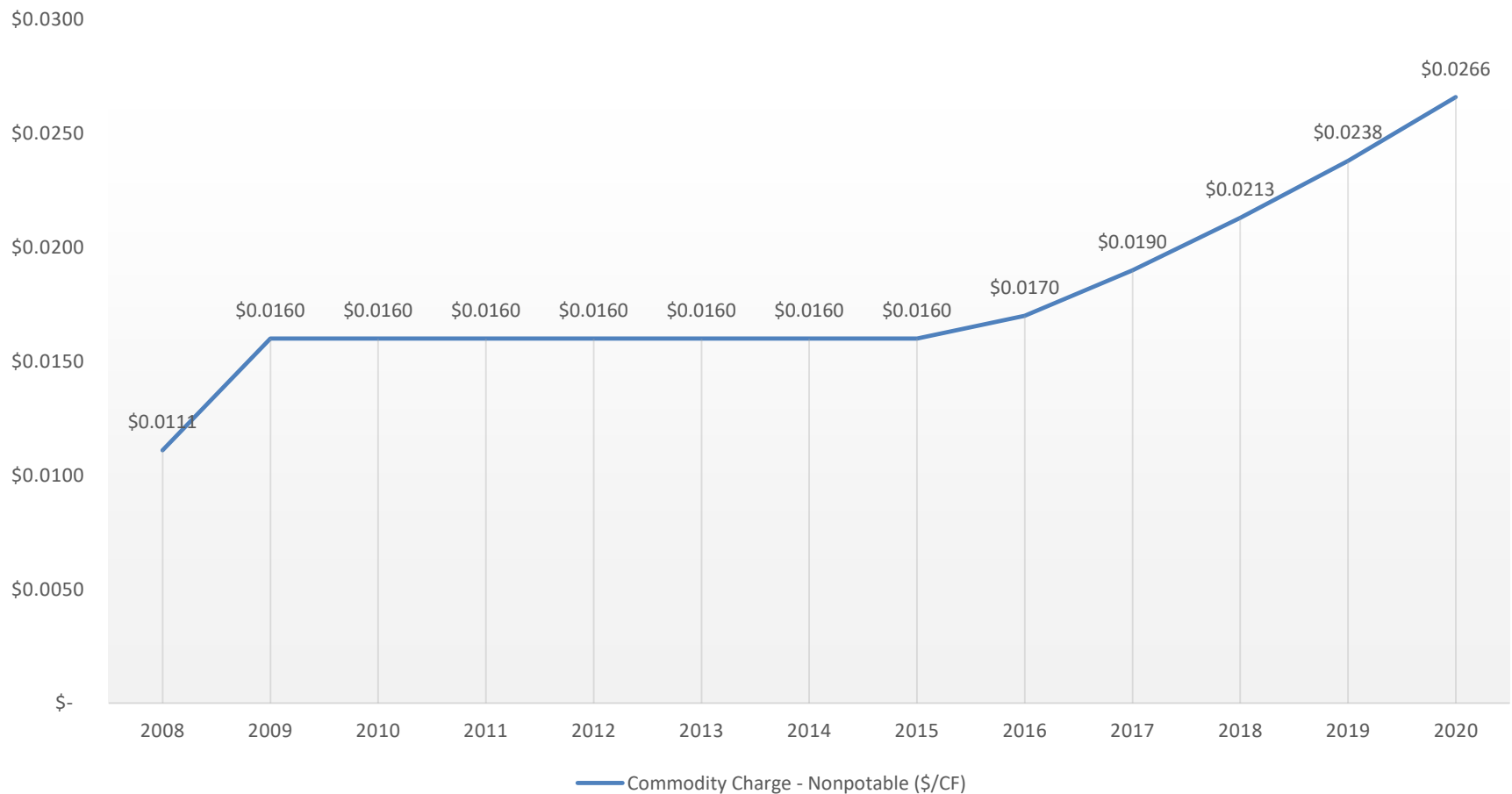
13 Year Daily Service Charge History



13 Year Commodity Charge History – Non-potable



13 Year Commodity Charge History – Non-potable (\$/CF)



Based on 2020 rates, how much does it cost to apply 24" of potable water to a five acre park?

- A.) \$7,209
- B.) \$14,418
- C.) \$21,627
- D.) \$28, 836



2020 Water Budget & Actual Usage



2020 Parks Water Budget	
District	Annual Allotted Water Costs
Central	\$660,249
Medians	\$211,793
North Athletics	\$335,806
North Parks	\$1,613,349
South Athletics	\$537,995
South Parks	\$1,006,688
Total	\$4,365,879
Domestic	\$50,000
Lakes - augmentation	\$50,000
Off Season	\$125,000
Daily Service Fees	\$177,847
Total	\$402,847
Grand Total	\$4,768,726

2020 Parks Annual Water Cost vs. Allotted Water Cost			
Annual Water Cost	Annual Allotted Water Cost	% Annual Allotted Water Cost Used	Variance +/-
\$4,266,399	\$4,365,879	98%	-\$99,480

Historically, how much annual precipitation does Colorado Springs receive?

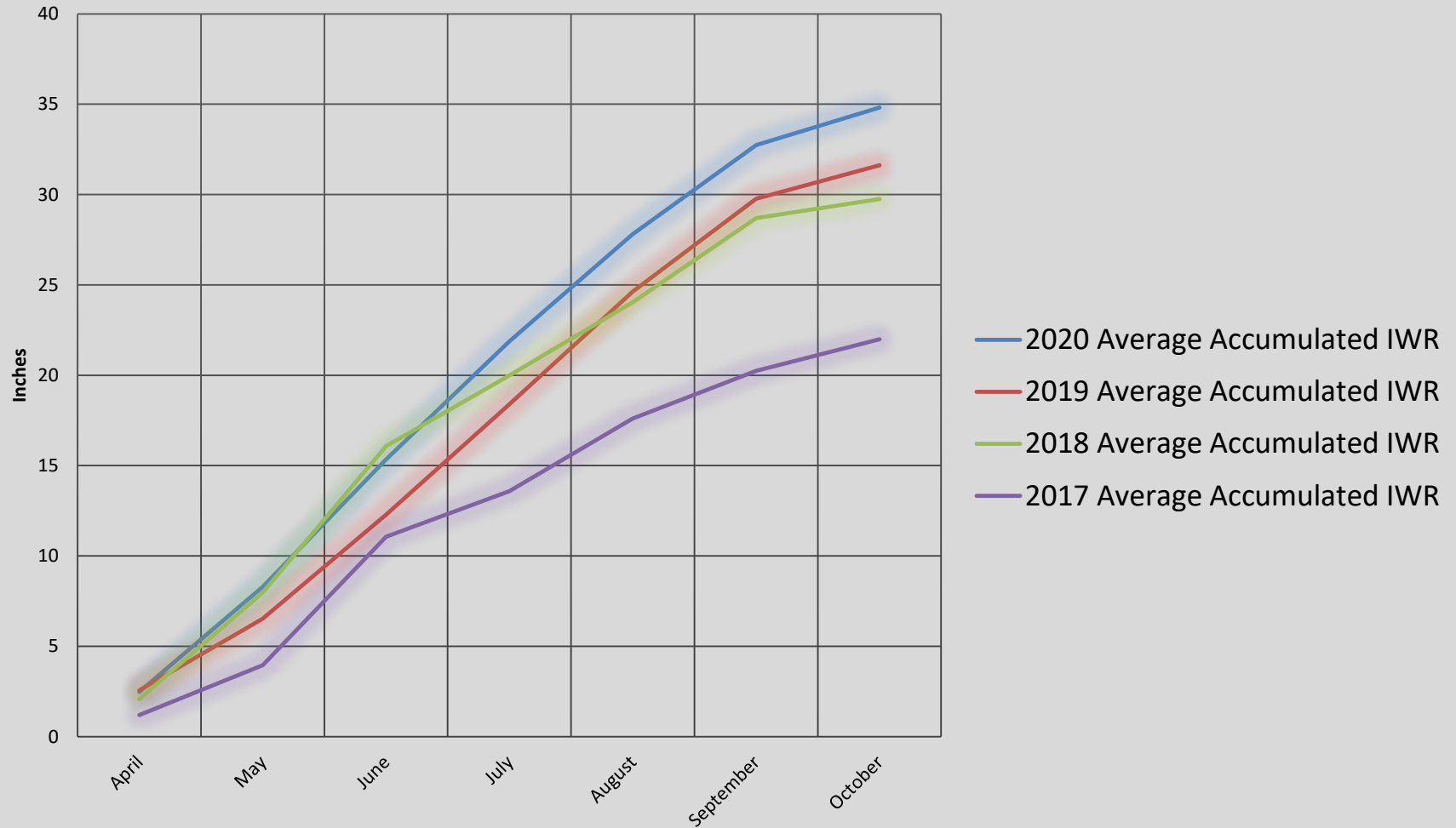


- A. 14-15 inches
- B. 16-17 inches
- C. 18-19 inches
- D. 20-21 inches

MONTH	PRECIP.
April	1.36
May	2.14
JUN	2.31
JUL	2.88
AUG	2.91
SEP	1.27
OCT	0.80
TOTAL	12.32



Accumulated Average Irrigation Water Requirement



Water Usage Reports



Row Labels	April Usage (inches)	May Usage (inches)	June Usage (inches)	July Usage (inches)	August Usage (inches)	September Usage (inches)	October Usage (inches)	Annual Usage (inches)	% Annual Allocation Used
Adams Park	1.45	2.37	3.81	4.75	3.96	4.58	1.39	22.32	93%
Audubon Park Irrigation	0.00	2.78	4.42	2.03	2.69	4.51	0.70	17.13	71%
Betty Krouse	0.00	2.36	2.89	3.27	4.04	5.60	1.25	19.40	81%
Bonforte Irrigation	0.33	1.45	3.31	4.31	2.04	3.86	1.06	16.35	68%
Boulder Park Irrigation	0.27	1.44	2.42	3.94	4.20	4.97	1.71	18.95	79%
Bristol	0.36	1.27	1.87	2.91	2.64	8.93	3.15	21.14	88%
Frank Waters	0.04	2.43	3.18	4.43	3.48	3.70	1.00	18.27	76%
Franklin	0.00	1.07	2.49	7.43	4.57	7.18	0.00	22.75	95%

Colorado Springs Water Shortage Ordinance

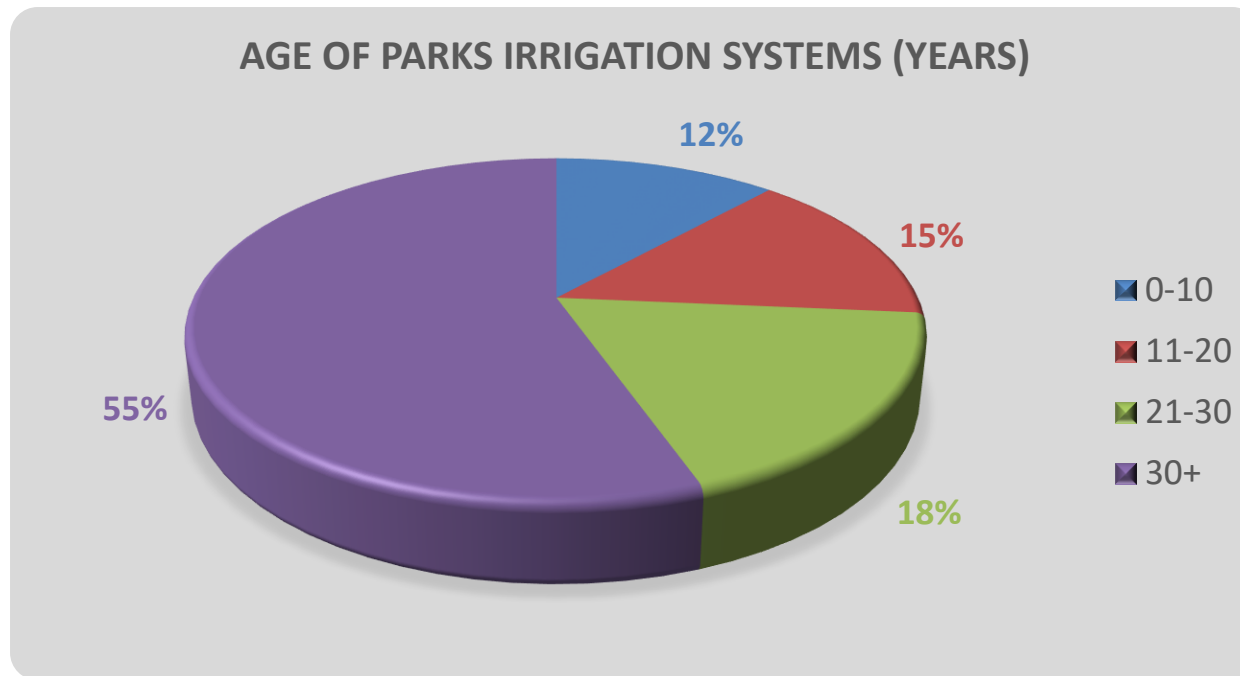


- **Watering with sprinklers** is limited to any three days of your choice per week.
- From May 1 to October 15, sprinklers can be operated before 10 a.m. and after 6 p.m. Sprinklers can be operated at any time of day before May 1 and after October 15 per week.
- Water allocation plans
- Broken or leaking sprinkler systems are required to be fixed within 10 days.
- Water runoff from irrigation flowing across the ground, street or sidewalk is prohibited.

Jacob's Study Infrastructure Analysis Findings

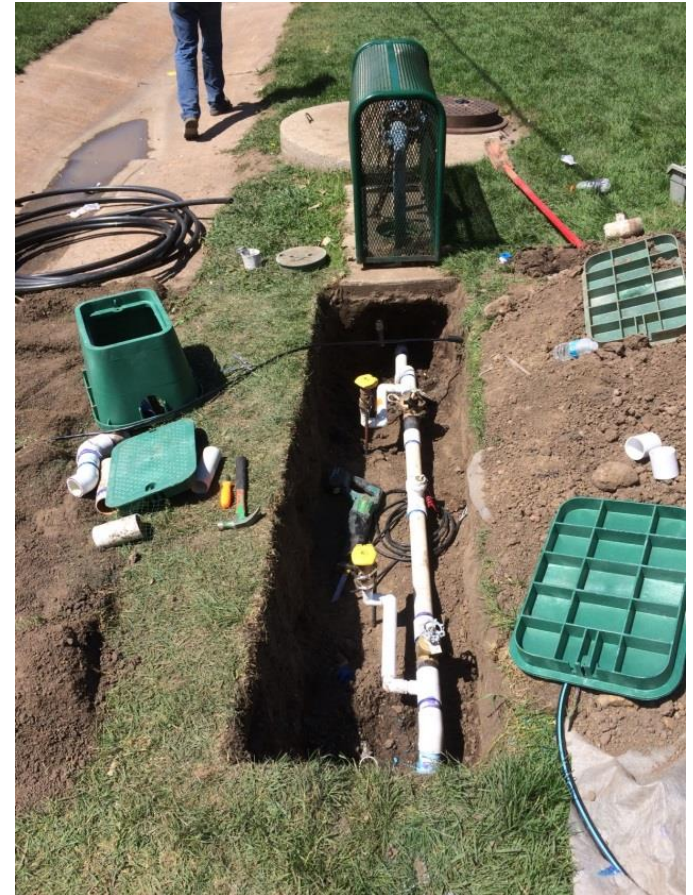


- Irrigation system life-cycle 25-30 years
- 128 sites accounting for 350 acres are 30+ years old



At an average cost of \$19,250 per acre, it will require \$6,737,500 to replace the irrigation systems that are 30+ years old. Current funding levels suggest this could take over 60 years.

Weather-Based Controllers, Flow Sensors, & Master Valves



Technologies to Improve Efficiency of Water Use



New System Installs



New in 2020

- Boddington Field and North Monument Valley Park - \$300K



Water Footprint Reduction



Before



After



Water Footprint Reduction



A before and after picture of a bluegrass parkway strip conversion at Wilson Park (2016)

Water Footprint Reduction



Water Footprint Reduction Summary

2012-2020



Focus Area	Acreage
<ul style="list-style-type: none">Native grass conversions	78
<ul style="list-style-type: none">Non-pot conversionSynthetic turfExpiration of school maintenance agreementsParking strips conversions	43
Total	121



New Park Design and Development



*Of total grass areas, native makes up 82% and sod 18%

Alternative Water Solutions



- Raw water
- Ground water
- Storm water
- Reclaimed/recycled
- Graywater

Staff Training & Certification



Local and national certifications

- 38 ALCC certified technicians



Questions?

